

A NEW *ANACHRYSIS* FROM SOUTH AFRICA  
(HYMENOPTERA: CHRYSIDIDAE: AMISEGINAE)

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Abstract.—*Anachrysis spanglerorum* Krombein, n. sp., is described from a male from Warmbad, Transvaal, South Africa, and differentiated from the male of *A. paradoxa* Krombein, the only other species in the genus. The tentative sex association in *A. paradoxa* is confirmed.

*Key Words:* Chrysididae, Amiseginae, wasp, *Anachrysis*, new species

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Kimsey and Bohart (1991: 95) recognized this unique male as distinct from the male of *Anachrysis paradoxa* Krombein (1986). It remained undescribed because of the tentative association of sexes in the monotypic genus *Anachrysis*. The type series consisted of the holotype male from Langjan Nature Reserve, Transvaal, 22°52' S, 29°14' E, 1980, and four female paratypes from Serowe, Botswana, 22°25' S, 26°44' E, 1983-1985.

Per Forchhammer, collector of the female paratypes, continued Malaise trapping in Serowe, and collected nine females and a single male of *A. paradoxa*, from 1987 through 1990, for the Smithsonian (USNM) and California Academy of Sciences (CAS). With the association of sexes confirmed in that species, the second species now can be described.

All specimens of this primitive genus have been collected in Malaise traps, suggesting that their behavior is similar to that of other Amiseginae, many of which are known to parasitize eggs of walking sticks. The females search for eggs of the walking stick hosts in leaf litter on the ground, and males explore the same niche to find mates.

*Anachrysis spanglerorum* Krombein,  
NEW SPECIES

Fig. 2

Male.—Length 4.8 mm, forewing 3.0 mm. Integument metallic blue, pedicel and basal

one (right) or two (left) flagellar segments, much of mesosternum, foretibia beneath and tarsi light reddish brown, remainder of flagellum darker brown; wings hyaline, veins dark. Vestiture sparse, silvery, short and erect to suberect.

Head except clypeus much as in *A. paradoxa*; clypeus (Fig. 2) with median lobe less produced, lateral margin gently rounded and without a large reflexed lamina as in *A. paradoxa* (Fig. 1).

Thorax with proportions and sculpture as in *A. paradoxa*; pronotum posterolaterally with a strong, curved carina margining side of depressed, narrow apex.

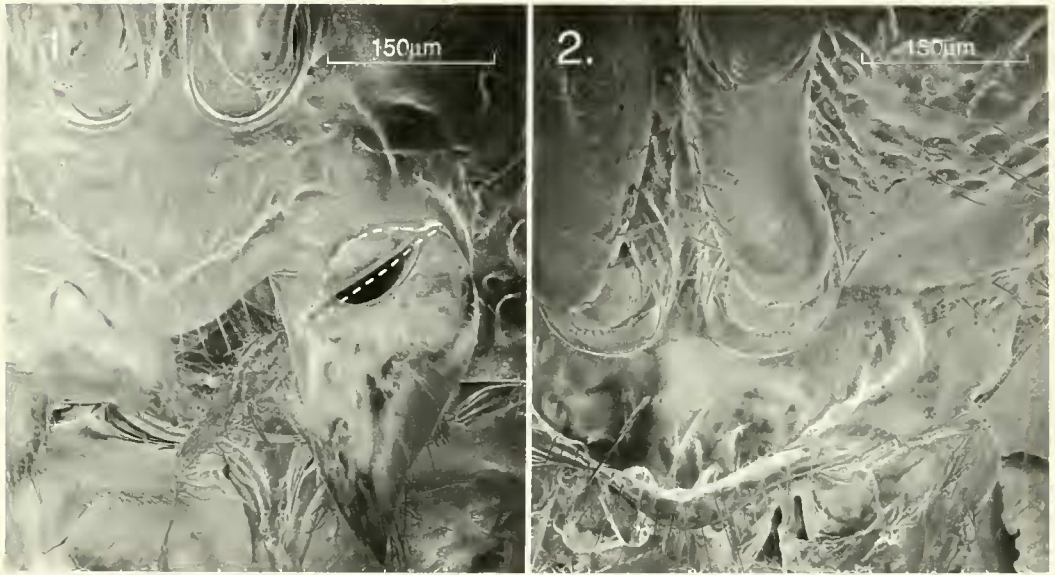
Abdomen with punctation as in *A. paradoxa* but tergum II with a narrow, median polished streak on basal two-thirds.

Female.—Unknown.

Holotype.—South Africa, Trsvl. [Transvaal], 5 mi W. Warmbad, [24°53' S, 31°03' E], Feb. 1968, Krombein & Spangler (USNM).

Etymology.—This species is named for my good friends, Paul and Phyllis Spangler, with happy memories of our field work in Africa.

Remarks.—The specimen bears a few Lepidoptera scales, suggesting that it had been collected in the large Malaise trap that we used in Kenya and South Africa. The pedicel and flagellum of the right antenna are glued on the locality label.



Figs. 1-2. 1, left area of clypeus of male *A. paradoxa*, Serowe, Botswana; dotted line indicates the apex of the reflexed lateral lobe. 2, left area of clypeus of male *A. spanglerorum*.

The male is readily distinguished from that of *A. paradoxa* by the conformation of the clypeus (cf. Figs. 1, 2), the narrow, polished median streak on T-II, and the light reddish brown coloration of most of the mesosternum, the foretibia beneath and tarsi as contrasted to the darker brown of these parts in *A. paradoxa*.

*Anachrysis paradoxa* Krombein  
Fig. 1

The male from Serowe, Botswana is extremely like the unique holotype from Langjan, South Africa. The shallow median emargination of the apical margin of T-II, thought to be of generic significance in the holotype, appears to be a developmental anomaly; the margin is evenly convex in the Botswana male. Eight of the thirteen known females have light red tibiae and tarsi, and five have only the tarsi darker brown. The variability in coloration of these females raises some doubt concerning the differences in coloration noted in males of the two species. The Serowe male has a curved, posterolateral carina, weaker than in *A.*

*spanglerorum*, margining the narrow, depressed apex of the pronotal disk. In the Langjan holotype, this area is not carinate but drops abruptly to the narrow, depressed apex as shown in Krombein (1986, Fig. 1).

It seems likely that the species is active throughout the year. During the period 1987-1990, Forchhammer collected nine females in February, May, June, August, September, October and December; the single male was taken in January.

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LITERATURE CITED

- Kimsey, L. S. and R. M. Bohart. 1991 (1990). *The Chrysidid Wasps of the World*. Oxford University Press, ix + 652 pp.
- Krombein, K. V. 1986. A remarkable new African amisegine wasp (Hymenoptera: Chrysididae: Amiseginae). *Proceedings of the Entomological Society of Washington* 88: 509-514.